

WHAT IS CLAIMED IS:

1. An electronic device comprising:  
a printed circuit board;  
an EMI shield comprising a flange around at least a portion of a perimeter of the EMI shield; and
- 5 one or more connectors coupled to the flange so as to removably couple and ground the flange of the EMI shield to the printed circuit board.
2. The electronic device of claim 1 wherein the EMI shield comprise a metallized, shaped polymer substrate.
3. The electronic device of claim 1 wherein the EMI shield comprises a  
10 top surface and a plurality of side walls, wherein the flanges extend laterally from the sidewalls in a plane that is substantially parallel to a surface of the printed circuit board.
4. The electronic device of claim 1 wherein the connectors are fixedly attached to at least one of the printed circuit board and the ground trace.
5. The electronic device of claim 1 wherein the connectors are removably  
15 attached to the flange.
6. The electronic device of claim 5 wherein the removable connectors extend through apertures in the flange of the EMI shield and apertures in the printed circuit board.
7. The electronic device of claim 6 wherein the flange comprises four  
20 corners, wherein the connectors are positioned at the four corners of the flange.
8. The electronic device of claim 7 wherein the connectors comprise a first arm comprising a first and second end and a second arm that comprises a first and second end, wherein the first end of the first arm is connected to the first end of the second arm such that the first arm and second arm are substantially orthogonal, wherein the second  
25 ends are configured to extend through the apertures in the flange and the printed circuit board.

9. The electronic device of claim 6 wherein the connectors are positioned between the four corners of the flange.

10. The electronic device of claim 6 wherein the connectors comprise a curved elongate body comprising a first end and a second end, wherein the first and second end are configured to extend through the apertures in the flange and the apertures in the printed circuit board when the curved body is straightened so as to releasably couple the EMI shield printed circuit board.

11. The electronic device of claim 10 wherein the curved elongate body comprises a plurality of contact points along its length such that when the curved elongate body is coupled to the flange, the contact points provide pressure against the flange.

12. The electronic device of claim 10 wherein the first end and second end provide a frictional force and tension force in a direction that is parallel to the surface of the printed circuit board so as to maintain the contact between the flange and printed circuit board.

13. The electronic device of claim 1 wherein the connectors are integrally formed in the flange, wherein the integrally formed connectors are insertable in apertures in the printed circuit board.

14. The electronic device of claim 1 wherein the printed circuit board comprises a ground trace, wherein the connectors are conductive so as to improve an electrical connection between the flange and the ground trace on the printed circuit board.

15. The electronic device of claim 1 wherein the connectors comprises an adhesive.

16. The electronic device of claim 15 wherein the printed circuit board comprises one or more grooves, wherein the adhesive is placed in the grooves to create a mechanical bond and grounding connection between the flange of the EMI shield and the printed circuit board.

17. The electronic device of claim 1 wherein the connectors are integrally formed in the flange.

18. The electronic device of claim 17 wherein the integrally formed connectors protrude from the flange toward the printed circuit board and are sized to be received in apertures in the printed circuit board.

19. The electronic device of claim 17 further comprising a second EMI shield comprising a flange around at least a portion of a perimeter of the second EMI shield, the second EMI shield being positioned on an opposite side of the printed circuit board from the EMI shield,

wherein the flange of the second EMI shield comprises an integral female connector that mates with the connector that protrudes through the aperture in the printed circuit board.

20. A kit comprising:

an EMI shield comprising a flange around at least a portion of a perimeter of the EMI shield; and

one or more connectors coupleable to the flange so as to removably couple and ground the flange of the EMI shield to the printed circuit board.

21. The kit of claim 20 wherein the EMI shield comprise a metallized, shaped polymer substrate.

22. The kit of claim 20 wherein the EMI shield comprises a top surface and a plurality of side walls, wherein the flanges extend laterally from the sidewalls in a plane that is substantially parallel to the surface of the printed circuit board.

23. The kit of claim 20 wherein the connectors are removably attached to the flange.

24. The kit of claim 20 wherein the removable connectors extend through apertures in the flange of the EMI shield and apertures in the printed circuit board.

25. The kit of claim 24 wherein the flange comprises four corners, wherein the connectors are positioned at the four corners of the flange.

26. The kit of claim 25 wherein the connectors comprise a first arm comprising a first and second end and a second arm that comprises a first and second end, wherein the first end of the first arm is connected to the first end of the second arm such that

the first arm and second arm are substantially orthogonal, wherein the second ends are configured to extend through the apertures in the flange and the printed circuit board.

27. The kit of claim 24 wherein the connectors are positioned between the four corners of the flange.

5 28. The kit of claim 24 wherein the connectors comprise a curved elongate body comprising a first end and a second end, wherein the first and second end are configured to extend through the apertures in the flange and the apertures in the printed circuit board to couple the EMI shield to the printed circuit board.

10 29. The kit of claim 28 wherein the curved elongate body comprises a plurality of contact points along its length such that when the curved elongate body is coupled to the flange, the contact points provide pressure against the flange.

30. The kit of claim 28 wherein the first end and second end provide a frictional force and tension force in a direction that is parallel to the surface of the printed circuit board so as to maintain the contact between the flange and the printed circuit board.

15 31. The kit of claim 20 wherein the connectors are integrally formed in the flange, wherein the integrally formed connectors are insertable in apertures in the printed circuit board.

20 32. The kit of claim 20 wherein the connectors are conductive so as to improve an electrical connection between the flange and a grounding portion of the printed circuit board.

33. The kit of claim 20 wherein the connectors comprises a conductive adhesive.

34. The kit of claim 20 further comprising instructions for use.

25 35. An electronic device comprising:  
a printed circuit board comprising an electronic component and a grounding portion;

an EMI shield comprising an upper surface that includes one or more features, a plurality of sidewalls that extend from the top surface, and a flange that extends in a direction substantially parallel to a surface of the printed circuit board; and

5 a housing of the electronic device configured to enclose the printed circuit board and EMI shield,

wherein the features on the top surface interact with an inner surface of the housing so as to compress the flange of the EMI shield against the grounding portion on the printed circuit board.

10 36. The electronic device of claim 35 wherein the EMI shield comprise a metallized, shaped polymer substrate.

37. The electronic device of claim 35 wherein the features comprise semi-circular protrusions that extend toward the inner surface of the housing.

38. The electronic device of claim 35 wherein the features are positioned substantially over the sidewalls.

15 39. The electronic device of claim 35 wherein the EMI shield further comprises a one or more features that extend from the flange toward the printed circuit board, and the printed circuit board comprises a corresponding feature that mates with the feature on the EMI shield to locate and retain the EMI shield with the grounding portion.

20 40. The electronic device of claim 39 wherein the feature on the flange of the EMI comprises a protrusion and the feature on the printed circuit board comprises a groove.

41. The electronic device of claim 39 wherein the feature on the printed circuit board is positioned adjacent the grounding portion.

25 42. An EMI shield comprising:  
a body comprising an upper surface that includes one or more features, a plurality of sidewalls that extend from the top surface, and a flange that extends laterally away from the sidewalls; and

wherein the features on the top surface are shaped to interact with an inner surface of a housing of an electronic device when the housing is around the printed circuit

board so as to compress the flange of the metallized polymer against a grounding portion on the printed circuit board.

43. The EMI shield of claim 42 wherein the body comprises a metallized polymer.

5 44. The EMI shield of claim 42 wherein the features comprise semi-circular protrusions that extend in a direction away from the flange.

45. The EMI shield of claim 42 wherein the features are positioned substantially over the sidewalls.

10 46. The EMI shield of claim 42 wherein the EMI shield further comprises a one or more features that extend from the flange away from the top surface, the features on the flange being configured to interact with a corresponding feature to locate and retain the EMI shield with the grounding portion.

47. The EMI shield of claim 46 wherein the feature on the flange of the EMI comprises a protrusion and the feature on the printed circuit board comprises a groove.

15 48. An electronic device comprising: /  
a printed circuit board comprising an electronic component and a ground trace;

an EMI shield comprising a top surface and a plurality of side walls; and  
a conductive connector assembly fixedly attached to the ground trace, the  
20 conductive connector releasably coupling the EMI shield to the ground trace.

49. The electronic device of claim 48 wherein the conductive connector assembly comprises opposed arms that contact opposite sides of the side walls of the EMI shield.

25 50. The electronic device of claim 48 wherein the EMI shield further comprise a flange that is coupled to the sidewalls, wherein the conductive connector assembly removably attaches to the flange.

51. The electronic device of claim 50 wherein the conductive connector assembly comprises opposed arms that contact opposite sides of the flange of the EMI shield.

52. A kit comprising: ✓

an EMI shield comprising a top surface and a plurality of side walls; and

a conductive connector assembly connectable to a ground trace of a printed circuit board, the conductive connector assembly configured to releasably couple the EMI

5 shield to the ground trace.

53. The kit of claim 52 wherein the conductive connector assembly

comprises opposed arms that contact opposite sides of the side walls of the EMI shield.

54. The kit of claim 52 wherein the conductive connector assembly

comprises a flange that is coupled to the sidewalls,

10 wherein the conductive connector assembly comprises opposed arms that contact opposite sides of the flange of the EMI shield.